

when the animal is within the range of time for breeding, thus, indicating to the herdsman to breed the animal at the next opportunity (e.g. "optimum time to breed").

Please insert the following paragraphs after the paragraph on pg. 6, beginning at line 8 and ending at line 18:

a2 The present invention is a self-contained electronic estrus detection device for optimum breeding time calculation and indication. The device has a housing for releasable placement on an animal and an electronic means operatively associated with the housing for detecting and processing information relating to number, duration, and frequency of mounts on the animal. The electronic means calculates and indicates optimum time to breed based on the detected and processed information. The information includes if the duration of the mounts meet a preset threshold of time and if a preset number of the mounts occur within a predetermined period of time.

The present invention is also a self-contained electronic estrus detection device having a housing for releasable placement on an animal and an indicating means for indicating suspect estrus, confirmed estrus and optimum time to breed. Suspect estrus is determined by the duration of a first mount meeting a preset threshold of time. Confirmed estrus is determined by a duration of the mount meeting a preset threshold of time and a preset number of mounts within a predetermined period time. Optimum time to breed is a predetermined range of time from the first of the preset number of mounts meeting the preset threshold and occurring within the predetermined period time. The predetermined range of time for dairy cows is between four hours and fourteen hours from the first of the preset number of mounts meeting the preset threshold and occurring within the predetermined period of time.

In the Claims:

Please amend the claims as follows:

- a3 1. A self-contained electronic estrus detection device for optimum breeding time calculation and indication comprising: